

PSC-240 Series



Input: 85-264VAC 47/63Hz
Output Voltage: 24 & 48 V DC
Rated Power: 240W max.



FEATURES

- Universal AC input range (85~264Vac)
- Support 1+1 or N+1 redundant system (suggest to use redundancy modules.)
- Built-in active PFC, PF>0.95
- High efficiency up to 94%
- Built-in current sharing function
- Built-in current limiting circuit
- Output protections: OVP/OLP/SCP/OTP
- Wide operating ambient temp (-25°C~70°C)
- 150% (360W) peak load capacity
- Easy Fuse Tripping due to High Overload Current
- Excellent Partial Load Efficiency
- Built-in DC OK relay contact
- Can be installed on 35 mm DIN rail
- 100% full load burn-in test
- PCB with conformal coating
- Suitable for critical applications
- Ultra-slim, 45mm width
- Three-year Warranty

CATALOG NUMBER

PSC-24024

PSC-24048

INPUT

Voltage Range	85Vac~264Vac, 120Vdc-375Vdc	
Frequency Range	47Hz~63Hz	
Power Factor (typical)	0.99/110Vac	0.95/230Vac
AC Current (max.)	<3.0 A/100Vac	<1.5A/230Vac
Inrush Current (Typical)	<20A/110Vac	<40A/230Vac Cold start
Leakage Current	Input—output: ≤0.25mA	Input—PG: ≤3.5mA
Efficiency (Typical) @230Vac	94%	93.8%

OUTPUT

DC Output	24V	48V
Rated Current	10A	5A
Current Range <i>Note 1</i>	0~10A	0~5A
Ripple and Noise (0~70°C)	≤240mV	≤480mV
(-25°C) <i>Note 2</i>	≤480mV	≤480mV
Voltage ADJ. Range	24~28V	48~56V
Voltage Accuracy	±3.0%	
Line Regulation	±0.5%	
Load Regulation	±1.0%	
Set-up Time	<3S@230Vac	
Hold up Time	≥20mS(230Vac input, Full load)	
Temperature Coefficient	±0.03%/°C	
Overshoot	<5.0%	
Power boost	150% of rated current	
Parallel function	supported	

ENVIRONMENTAL

Operating amb. Temp. & Hum.	-25°C~70°C; 20%~90%RH No condensing
Storage Temp. & Hum.	-40°C~85°C; 5%~95%RH No condensing

PROTECTIONS

Overload Protection	>130%-200% Rated Output Power Protection type: Hiccup Mode- recovers automatically after fault condition is removed
Over Voltage Protection	110~145% Protection Type: Clamp by Zener diode
Short Circuit Protection	Protection to Zero Voltage
Over Current Protection	110%-180%

SAFETY & EMC

Note 3

Safety Standards	UL508; UL62368-1; UL60950-1; IEC62368-1, EN62368-1
Withstand Voltage	Primary-Secondary:3.0kVac/10mA .Primary-PG:2.5kVac/10mA. Secondary-PG:0.5kVac/20mA.
Isolation Resistance	10M ohms
EMC Emission	Compliance to EN55032 Class B
Harmonic Current	Compliance to EN61000-3-2, Class A
EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,11;

OTHER

MTBF (MIL-HDBK-217F)	More than 300,000Hrs (25°, Full load)
Dimension (L*W*H)	45*124*119mm
Packing	24pcs/CTN, 21Kgs/CTN, 0.045cbm
Cooling method	Cooling by free air convection

NOTES

1. All parameters NOT specially mentioned are measured at rated input, rated load and 25° of ambient temperature.
2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor.
3. The power supply is considered as a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies".

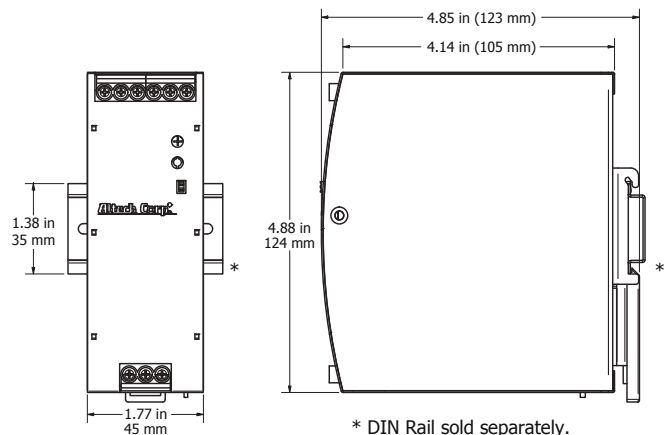
Mechanical Specification

1.AC terminal blocks installation information

Terminal No.	Function	Wire Spec	Recommended Torque
1	PG	20~10AWG	5Nm
2	N		
3	L		

2.DC terminal blocks installation information

Terminal No.	Function	Wire Spec	Recommended Torque
4 & 5	DC OK Relay Contact	20~10AWG	5Nm
6 & 7	+V		
8 & 9	-V		



AC/DC Terminal

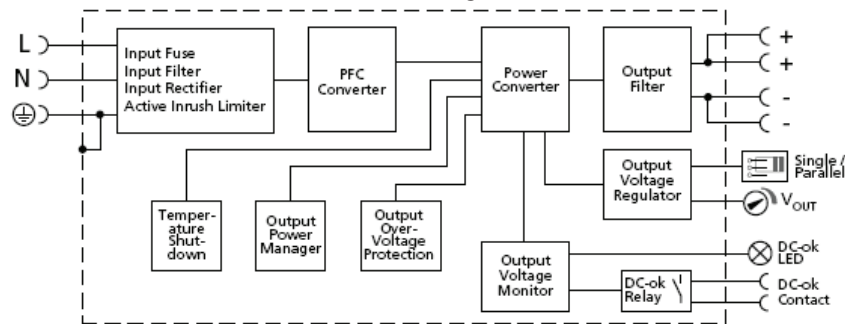
Type	Screw terminal blocks
Solid Wire	0.5-6mm ²
Strand Wire	0.5-4mm ²
Wire Spec	AWG20-10 (PG Wire>18AWG)
Max Wire Diameter	2.8mm
Recommended stripping length	7mm
Screwdriver	3.5mm Straight or Cross Screwdriver
Recommended Torque	5NM

Additional Functions

DC-OK	V On: when output voltage is up to 90% of rated output voltage V Off: when output voltage is down to 80% of rated output voltage
DC-OK relay contact rating	Max 30V/1A or 60V/0.3A or 30Vac/0.3A Resistive load

Block Diagram

Functional Diagram



Peak Loading



Derating Curve

